

**Amendments to the Drawings**

The attached sheets of drawings include changes to Figure 2 and Figure 6. These sheets replace the original sheets including Figure 2 and Figure 6. In both Figure 2 and Figure 6, the corresponding SEQ ID NOs have been added.

Attachment: Replacement Sheets  
Annotated Sheets Showing Changes

## REMARKS

In the present amendment, claims 1, 5, 6, 16 and 29 have been amended. Claim 16 has been canceled. The amendments to the claims are supported throughout the specification, in the claims and in the sequence listing. In addition, the specification has been amended at page 10 to indicate that the patent or application file contains at least one drawing executed in color as required under 37 CFR § 1.84, and to correct a typographical error on page 46. No new matter is believed to be added.

After entry of these amendments, claims 1-3, 5-15, 17-27 and 29-39 are pending.

## Drawings/Specification

The drawings stand objected to under 37 CFR § 1.83(a) because Figures 3 and 7 purportedly fail to show the colors as described in the Brief Description of the Figures. Applicants respectfully submit that the as-filed figures included two color figures: FIGS. 3 and 7. Submitted herewith is a Petition under 37 CFR § 1.84 requesting acceptance of these color drawings.

In addition, the specification stands objected to for referencing an attorney docket number. Applicants have removed this reference. Withdrawal of this objection is requested.

The specification also stands objected to for containing sequence disclosures that fail to comply with the requirements set forth in 37 CFR § 1.821. Applicants have amended the specification to include the corresponding SEQ ID NOs for the sequences on page 96. The Examiner also alleges that Tables I-V represent linear amino acid sequence disclosures, and, therefore, need a heading identifying the protein name and its corresponding SEQ ID NO. Applicants have amended the specification accordingly although they respectfully point out that Table II does not correlate to a SEQ ID NO so only a descriptive title has been added.

Applicants have also amended claim 1 so that it recites SEQ ID NO:1 and points out that SEQ ID NO:1 and SEQ ID NO:13 are the same sequence. Additionally, Applicants have amended Figures 2 and 6 to include the proper corresponding SEQ ID NOs. Replacement drawings and Annotated drawings showing the changes are enclosed herein. Applicants have also amended the specification on page 10 to correct the corresponding SEQ ID NOs in the figure legend.

The Examiner has also objected to the specification for containing hyperlinks. Applicants have amended the specification to remove the hyperlinks on pages 22 and 96. Withdrawal of this objection is requested.

**Rejection of claims 1 and 5 under 35 U.S.C. § 101**

The Examiner has rejected claims 1 and 5 as allegedly being directed to non-statutory subject matter without requiring the performance of a result outside of a computer or representing some type of physical transformation which is concrete or tangible. That rejection is respectfully traversed to the extent the rejection is applied to the claims as amended.

Applicants have amended claims 1 and 5 to include the step of screening the chemical entity in an assay that characterizes binding to said GR Site II in order to comply with 35 U.S.C. § 101. Applicants respectfully request reconsideration by the Examiner and withdrawal of this rejection.

**Rejection of claims under 35 U.S.C. § 112, second paragraph**

Claims 1, 5-10, 16, 27 and 29 stand rejected under 35 U.S.C. § 112, second paragraph, for allegedly being indefinite. That rejection is respectfully traversed to the extent the rejection is applied to the claims as amended

(a) The Examiner alleges that the phrase “any part of the cavity” in claim 1, 6 and 29, and the phrase “any part of” in claim 5, renders the claims indefinite. Applicants have amended these phrases to read “the cavity” and “said GR Site II,” respectively. By this amendment, Applicants believe that they have obviated this rejection.

(b) The Examiner alleges that the amino acid residues in claims 1, 5, 6, 27 and 29 do not match the amino acid sequence of SEQ ID NO:13 as well as those in Figure 2. Applicants have amended the specification on page 10 and Figure 2 so that the SEQ ID NOS correspond accurately. Additionally, Applicants have amended claim 1 to refer to SEQ ID NO:1. Support for this amendment can be found throughout the specification, for example on page 96, lines 15-31. By this amendment, Applicants believe that they have obviated this rejection.

(c) The Examiner alleges that the phrase “human GR; rat GR...” in claim 16 renders the claim indefinite. Applicants have amended claim 16 to include the corresponding SEQ ID NOS

as defined in Figure 6. By this amendment, Applicants believe that they have obviated this rejection.

(d) The Examiner has rejected claims 7-10 under 35 U.S.C. § 112, second paragraph, as they are dependent upon rejected independent claims. As the independent claims have been amended to overcome the Examiner's rejections, Applicants believe that the rejection of claims 7-10 has been overcome as well.

**Rejection of claims under 35 U.S.C. § 102(e) and § 103(a)**

The Examiner has rejected claims 1, 5-10, 16, 27 and 29 under 35 U.S.C. § 102(e) and § 103(a) as allegedly being anticipated by or, in the alternative, as obvious over US patent 6,965,850 (hereinafter "'850").

It is well settled that "[a] claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference." MPEP §2131 (quoting *Verdegaal Bros. v. Union Oil Co. of Calif.*, 2 USPQ2d 1051, 1053 (Fed. Cir. 1987)). "The identical invention must be shown in as complete detail as is contained in the . . . claim." *Id.* (quoting *Richardson v. Suzuki Motor Co.*, 9 USPQ2d 1913, 1920 (Fed. Cir. 1989)). Therefore, '850 must describe each and every element of claims 1, 5 and 6 in order to anticipate these claims under Section 102(b).

Applicants respectfully submit that '850 does not teach each and every element of the claims. Amended claims 1, 5, 6 and 29 are directed to methods for evaluating the potential of a chemical entity to bind to a GR Site II, methods of designing a ligand of a GR Site II, methods for identifying modulators of a GR, and methods of identifying a ligand of a GR Site II, respectively. Amended claims 1, 5, 6 and 29 also recite that the GR Site II is comprises the amino acids E537-V543, L566, G567, Q570-W577, S599-A607, W610, R611, R614, Q615, P625, Y663, L664 and K667 and is defined by the structure coordinates according to Table 1. Amended claim 1 also recites the structure coordinates according to Tables, III-V.

In contrast to the instant invention, '850 describes the use of compounds binding to the co-activator binding site of NHRs which is not Site II. Site II of the instant invention is situated on almost the opposite side of the protein from the Site II that is disclosed in '850. In addition, Site II of the instant invention comprises a different amino acid sequence than that disclosed for the Site II disclosed in '805. Site II of '850 comprises amino acids V571, I572, A574, V575,

A578, K579, F584, Q592, M593, L596, Q597, W600, E751, M752, and E755-I757 which are different from Site II of the instant invention. Further, the structural coordinates disclosed in ‘850 are different than those recited in the instant claims. Because ‘850 teaches neither the Site II nor its structural coordinates recited in the instant claims, it does not teach every element of the claims 1, 5 and 6, as amended, or of dependent claims 7-10, 27 and 29, and, therefore, does not anticipate the instant claims. Thus, Applicants respectfully request reconsideration by the Examiner and withdrawal of this rejection.

Claims 1, 5-10, 16, 27 and 29 also stand rejected under §103(a) as being unpatentable over ‘850. As discussed above, Applicant submits that ‘850 does not disclose the subject matter of the claims 1, 5 and 6, as amended, nor claims 7-10, 27 and 29 that ultimately depend therefrom. Accordingly, Applicants request reconsideration and withdrawal of this rejection.

The Examiner has also rejected claims 1, 5-10, 16, 27 and 29 under 35 U.S.C. § 103(a) as being unpatentable over WO 00/52050 (hereinafter “‘050”) in view of US Patent 5,856,116 (hereinafter “‘116”).

Amended claims 1, 5 and 6 are directed to methods for evaluating the potential of a chemical entity to bind to GR Site II, wherein said GR Site II is a structure described by the structure coordinates of amino acids E537-V543, L566, G567, Q570-W577, S599-A607, W610, R611, R614, Q615, P625, Y663, L664 and K667 of SEQ ID NO:1 according to Table I, Table III, Table IV or Table V. These structure coordinates are not disclosed in either ‘050 or ‘116. As such, Applicants submit that ‘050 does not disclose the subject matter of the claims 1, 5 and 6, as amended, nor claims 7-10, 27 and 29 that ultimately depend therefrom and, therefore, do not render these claim obvious. Applicants respectfully submit that ‘116 does not cure the deficiencies of ‘050, and that accordingly the combination of ‘050 and ‘116 does not suggest Applicants’ claimed invention. Accordingly, Applicants request reconsideration and withdrawal of this rejection.

The Examiner has also rejected claims 1, 5-10, 16, 27 and 29 under 35 U.S.C. § 103(a) as being unpatentable over US Patent Application Publication No. 2005/0181362 (hereinafter “‘362”). Specifically, the Examiner alleges that ‘362 teaches the crystallization of the complex of GR ligand binding with two ligands and the determination of the three-dimensional structure by the X-ray diffraction method.

Amended claims 1, 5 and 6 are directed to methods for evaluating the potential of a chemical entity to bind to GR Site II, wherein said GR Site II is a structure described by the structure coordinates of amino acids E537-V543, L566, G567, Q570-W577, S599-A607, W610, R611, R614, Q615, P625, Y663, L664 and K667 of SEQ ID NO:1 according to Table I, Table III, Table IV or Table V. These structure coordinates are not disclosed in '362. As such, Applicants submit that '362 does not disclose the subject matter of the claims 1, 5 and 6, as amended, nor claims 7-10, 27 and 29 that ultimately depend therefrom and, therefore, do not render these claim obvious. Accordingly, Applicants request reconsideration and withdrawal of this rejection.

**Rejection of claims 1, 5-10, 16, 27 and 29 under 35 U.S.C. § 103(a) over '362 in view of '850**

The Examiner has rejected claims 1, 5-10, 16, 27 and 29 under 35 U.S.C. § 103(a) as being unpatentable over '362 in view of '850. For the foregoing reasons, '362 does not disclose the subject matter of the claims 1, 5 and 6, as amended, nor claims 7-10, 27 and 29 that ultimately depend therefrom and, therefore, do not render these claim obvious. Applicants respectfully submit that '850 does not cure the deficiencies of '362, and that accordingly the combination of '362 and '850 does not suggest Applicants' claimed invention. Applicants request reconsideration and withdrawal of this rejection.

**CONCLUSION**

In view of the foregoing amendments and remarks, allowance of the application is respectfully requested. The Examiner is invited to contact the undersigned if there are any questions concerning the prosecution of this application.

Appl. No. 10/621,807  
Docket No. D0250 NP

The Commissioner is authorized to charge Deposit Account 19-3880 (Bristol-Myers Squibb Company) for any requisite fees due or to credit any overpayment.

Respectfully submitted,

Bristol-Myers Squibb Company  
Patent Department  
P.O. Box 4000  
Princeton, NJ 08543-4000  
609-252-4323

Melissa Handler  
Melissa Handler, Ph.D.  
Agent for Applicants  
Reg. No. 52,988

Date: June 20, 2007

ANNOTATED SHEET

**FIGURE 2 (continued)**

RXRalpha	306	WNELLIASFS	HRSIAV.....	..KDGILLAT	GL...HVHRN	..S..AHSAG	VG.....
RARgamma	267	CLDILMLRIC	TRY...TPE.	..QDTMTFSD	GL...TLNRT	..Q..MH...	..NAGF....
PR	755	WMSLMVFGLG	WRSYK....H	VSGQMLYFAP	DL...ILNEQ	..R..MKESS	FY.....
AR	742	WMGLMVFAMG	WRSFT....N	VNSRMLYFAP	DL...VFNEY	..RM.HKSRM	Y.....
ERalpha	382	WLEILMIGLV	WRSME.....	.HPGKLLFAP	NL...LLDRN	..Q.GKCVEG	MV.....
ERbeta	331	WMEVLMMGLM	WRSID.....	.HPGKLIFAP	DL...VLDRD	..E.GKCVEG	IL.....
VitDR	216	AIEVIMLRSN	ESF...TMD.	...DMSWTCG	N.QDYKYRVS	..D..VT...	..KAGH....
PPARgamma	322	VHEIIYTMLA	SLM...NK..	...DGVLISE	GQ...GFMTR	E.F..LK...	.....SLRK
MR	806	WMCLSSFALS	WRSYK....H	TNSQFLYFAP	DL...VFNEE	.KM..HQSAM	YE.....
TRbeta	301	CMEIMSLRAA	VRY...DPE.	..SETLTLng	EM...AVTRG	..Q..LK...	..NGGL....
GR	600	WMFLMAFALG	WRSYR....Q	SSANLLCFAP	DL...IINEQ	.R...MTLPC	MY.....
RXRalpha	345	...A.IF.DR	VLTELVSKMR	DMQMDKTELG	CLRAIVL.FN	PDSKG...LS	.....
RARgamma	305	..GP.LT.DL	VFAFAGQLL.	PLEMDDTETG	LLSAICL.IC	GDRMD...LE	.....
PR	796	...S.LC.LT	MWQIPQEFLV.	KLQVSQEEFL	CMKVLLL.LN	.TIP.LEGLR	.....
AR	783	...S.QC.VR	MRHLSQEFG.	WLQITPQEFL	CMKALLL.FS	.IIP.VDGLK	.....
ERalpha	422	...E.IF.DM	LLATSSRFR.	MMNLQGEEFL	CLKSIILLNS	.GV.....	YTF.LSSTLK
ERbeta	371	...E.IF.DM	LLATTSSRFR.	ELKLQHKEYL	CVKAMILLNS	.....	..LVTAT.Q
VitDR	255	..SLELI.EP	LIKFQVGLK.	KLNLHEEEHV	LLMAICI.VS	PDRPG...VQ	.....
PPARgamma	359	PFGD.FM.EP	KFEFAVKFN.	ALELDDSDL	IIFIAVII.LS	GDRPG...LL	.....
MR	848	...L..C.QG	MHQISLQFV.	RLQLTFeeYT	IMKVLLL.LS	.TIP.KDGLK	.....
TRbeta	339	..GV.VS.DA	IFDLGMSLS.	SFNLDDTEVA	LLQAVLL.MS	SDRPG...LA	.....
GR	641	...D..QCKH	MLYVSELH.	RLQVSYEEYL	CMKTLLL.LS	.SVP.KDGLK	.....
RXRalpha	386	...NPAEVEA	LREKVYASLE	AYCKH..KYP	EQPG.....	..RFAKLLL	RLPALRSIGL
RARgamma	336	..EPEKVDK	LQEPLLEALR	LYARR..RRP	SQPY.....	..MFPRMLM	KITDLRGIST
PR	837	..SQTQFEE	MRSSYIRELI	KAIG...LRQ	K...GVV..S	SSQRFYQLTK	LLDNLHDLVK
AR	824	..NQKFFDE	LRMNYIKELD	RIIA...CKR	K...NPT..S	CSRRFYQLTK	LLDSVQPIAR
ERalpha	467	SLEEKDHIIHR	VLDKITDTLI	HLMA...KAG	L...TLQ..Q	QHERLAQLLL	ILSHIRHMSN
ERbeta	411	DADSSRKLAH	LLNAVTDALV	WVIA...KSG	I...SSQ..Q	QSMRLANLLM	LLSHVRHASN
VitDR	297	...DAALIEA	IQDRLSNTLQ	TYIRC..RHP	PP.L.....	..LYAKMIQ	KLADLRSLNE
PPARgamma	402	..NVKPIED	IQDNLLQALE	LQLKL..NHP	ESSQ.....	..LFAKLLQ	KMTDLRQIVT
MR	888	..SQAAFEE	MRTNYIKELR	KMVT.KCPNN	S...G....Q	SWQRFYQLTK	LLDSMHDLV
TRbeta	380	...CVERIEK	YQDSFLLAFE	HYINY..RKH	HVTH.....	..FWPKLLM	KVTDLRMIAGA
GR	681	..SQELFDE	IRMTYIKELG	KAIV...KRE	G...N..SSQ	NWQRFYQLTK	LLDSMHEVVE
RXRalpha	432	KCLEHLFFFK	LIGDTPIDTF	LMEMLEAPHQ	MT.....	.....	.....
RARgamma	382	KGAERA....	.....	.....	ITLKMEI	PGP...MPP	LIREMLENP.
PR	886	QLHLYC....	.....	.....	.....	.....	L
AR	873	ELHQFT....	.....	.....	.....	.....	F
ERalpha	519	KGMEHL....	.....	.....	.....	.....	Y
ERbeta	463	KGMEHL....	.....	.....	.....	.....	L
VitDR	342	EHSKQY....	.....	...RCLSFQP	ECSMK..LTP	LVLEVFG...	
PPARgamma	448	EHVQLL....	.....	...QVIKKTET	DMS...LHP	LLQEIYKDL.	
MR	937	DLLEFC....	.....	.....	.....	.....	F
TRbeta	426	CHASRF....	.....	...LHMKVEC	PT...ELFPP	LFLEVFE...	
GR	730	NLLNYC....	.....	.....	.....	.....	F

## ANNOTATED SHEET

FIGURE 6

u87951 Squirrel  
AF141371 Pig  
113196 Guinea Pig  
u87953 Marmoset  
u87952 Ma'z Monkey  
Human  
m14053 rat  
x04435 mouse

MDSKESLTP. GKEENPSSVL TQERGNVMDF CKILRGGATL KVSVSSTSLA  
.....  
MDLKESVTSS .. KEVPSSVL GSERRNVIDF YKTVRGGATV KVSASSPSLA  
MDSKESLTP. GKEENPSSVL TQERGNVMDF CKILRGGATL KVSVSSTSLA  
MDSKESLTP. GKEENPSSVL TQERGNVMDF SKILRGGATL KVSVSSTSLA  
MDSKESLTP. GREENPSSVL AQERGDVMDF YKTLRGGATV KVSASSPSLA  
MDSKESLAPP GRDEVPGSLL GQGRGSVMDF YKSLRGGATV KVSASSPSVA  
MDSKESLAPP GRDEVPPSLL GRGRGSVMDL YKTLRGGATV KVSASSPSVA

u87951 Squirrel  
AF141371 Pig  
113196 Guinea Pig  
u87953 Marmoset  
u87952 Ma'z Monkey  
Human  
m14053 rat  
x04435 mouse

AASQSDSKQQ	RLLVDFPKGS	VSNAQQ....	.....	.....	PDLS
.....	.VSASSPSLA	AVSQPD <span style="font-variant: small-caps;">SKQQ</span>	RLAVDFPKGS	GSNAQQPDLS	
AAAQS <span style="font-variant: small-caps;">DSKQR</span>	RLLVDFPKGS	GSNAQQ....	.....	.....	PDLS
AASQSDSKQQ	RLLVDFPKGS	VSNAQQ....	.....	.....	PDLS
AASQSDSKQQ	RLLVDFPKGS	VSNAQQ....	.....	.....	PDLS
VASQSDSKQR	RLLVDFPKGS	VSNAQQ....	.....	.....	PDLS
AASQADSKQQ	RILLDFSKGS	TSNVQQRQQQ	QQQQQQQQQQ	QQQQQQPGLS	
AASQADSKOO	RILLDFSKGS	ASNAOO....	....OO	OOOOPOPDL	S

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KAVSLSMGLY	MGETETKVMG	NDLGFHQQGQ	ISLSSGETDL	QLLEESIANL
KAVSLSMGLY	MGETETKVMG	SDLGFHQQGQ	ISLSSGETDF	RLLEESIANL
KAVSLSMGLY	MGETETKVMG	NDLGFHQQGQ	ISLPGETDF	RLLEESIANL
KAVSLSMGLY	MGETETKVMG	NDLGFHQQGQ	ISLSSGETDL	QLLEESIANL
KAVSLSMGLY	MGETETKVMG	NDLGFHQQGQ	ISLSSGETDL	QLLEESIANL
KAVSLSMGLY	MGETETKVMG	NDLGFHQQGQ	ISLSSGETDL	QLLEESIANL
KAVSLSMGLY	MGETETKVMG	NDLGFHQQGQ	ISLSSGETDL	KLLEESIANL
KAVSLSMGLY	MGETETKVMG	NDLGPHQQGQ	LGLSSGETDF	RLLEESIANL
KAVSLSMGLY	MGETETKVMG	NDLGYPOOOGO	LGLSSGETDF	RLLEESIANL

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x04435 mouse

NRSTSVPENP	KSSASSSVSA	APKEKEFPKT	HSDVSSEQQN	LKGQTGSNGG
SRSTSVPENP	KSSASAAGPA	APAEKAFTPCT	HSDGAPEQPN	VKGQTGTNGG
SRSTSVPENP	KNSASA.VSG	TPTE.EFPKT	QSDLSSSEQEN	LKSQAGTNNGG
NRSTSVPENP	KSSASSSVSA	APKEKEFPKT	HSDVSSEQQN	LKGQTGTNGG
NRSTSVPENP	KSSASSSVSA	APKEKEFPKT	HSDVSSEQQN	LKGQTGTNGG
NRSTSVPENP	KSSASTAVSA	APTEKEFPKT	HSDVSSEQQQH	LKGQTGTNGG
NRSTSVPENP	KSSTSATGCA	TPTEKEFPKT	HSDASSEQQN	RKSQTGTNGG
NRSTSRPENP	KSSTPAAGCA	TPTEKEFPOT	HSDPSSEOOQN	RKSOPGTNGG

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AF141371 Pig  
113196 Guinea Pig  
u87953 Marmoset  
u87952 Ma'z Monkey  
Human  
m14053 rat  
x04435 mouse

NVKLYTADQS	TFDI....LQ	DLEFSSGSPG	KETNQSPWKS	DLLIDENCLL
NVKLFTTDQS	TFDIWRKKLQ	DLELPSSGSPG	KETSESPWSS	DLLIDENCLL
NVK.FPPDQS	TFDI....LK	DLEFSSGSPG	KERSESPWRP	DLLMDESCLL
NAKLCTADQS	TFDI....LQ	DLEFSSGSPG	KETNQSPWRS	DLLIDENCLL
NVKLYTADQS	TFDI....LQ	DLEFSSGSPG	KETNQSPWRS	DLLIDENCLL
NVKLYTTDQS	TFDI....LQ	DLEFSSGSPG	KETNESPWRS	DLLIDENCLL
SVKLYPTDQS	TFDL....LK	DLEFSAGSPS	KDTNESPWRS	DLLIDEN.LL
SVKLYTTDOS	TFDI....LO	DLEFSAGSPG	KETNESPWRS	DLLIDEN.LL

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**FIGURE 2**

RXRalpha	225	S.....	ANEDM.....	.....	.....	PVE.RILEAE	LAVE.PKTET
RARgamma	182	L.....	SPQ..LEE..	.....	.....	LIT.KVSKAH	QETF.P....
PR	682	.....	.....Q.	.....LI.	.....P	PLINLLMSIE	..PD.V....
AR	669	.....	.....	.....C Q.....	.....P	IIFLNVLEAIE	..PG.V....
ERalpha	305	.....	.....	.....	.....	SLALSLTAD	QMVSALLDAE ..PP.I....
ERbeta	261	.....	.....	.....	.....	DALSPE	QLVLTLLEAE ..PP.H....
VitDR	120	.LRPKL....	SEE..QQR..	.....	.....	IIA.IILDAH	HKTY.D....
PPARgamma	207	E.....	SAD..LRA..	.....	.....	LAK.HLYDSY	IKSF.P....
MR	731	.....	.....S RA....LT.	.....	.....P	SPVMVLENIE	..PE.I....
TRbeta	211	.....KPEP	TDE..EWE..	.....	.....	LIK.TVTEAH	VATNAQ....
GR	523	.....	.....ATLPQLT.	.....	.....P	TLVSLLEVIE	..PE.V....
RXRalpha	249	YVEANMGLNP	SSPNDPVTN.	.....	.....IC	.....	.....
RARgamma	203	.....	.....	.....	.....S	LCQL.GKYTT	N.....
PR	699	.....	.....I	YAGHDNTKPD	TSSSLLTS..	.....	.....
AR	685	.....	.....V	CAGHDNNQPD	SFAALLSS..	.....	.....
ERalpha	327	.....	.....L	YSEYDPTRPF	SEASMMGL..	.....	.....
ERbeta	281	.....	.....V	LISR.....	TEASMMMS..	.....	.....
VitDR	145	.....	.....	.....	.....P	.....	TYSDFCQFR
PPARgamma	.....	.....	.....	.....	.....	.....	.....
MR	750	.....	.....V	YAGYDSSKPD	TAENLLST..	.....	.....
TRbeta	236	.....	.....	.....	.....G	SHWKQKRKFL	P.....
GR	544	.....	.....L	YAGYDSSVPD	STWRIMTT..	.....	.....
RXRalpha	.....	.....	.....	.....	.....	.....	.....
RARgamma	214	..SSADHRVQ	L.....	.....	.....	.....	.....
PR	.....	.....	.....	.....	.....	.....	.....
AR	.....	.....	.....	.....	.....	.....	.....
ERalpha	.....	.....	.....	.....	.....	.....	.....
ERbeta	.....	.....	.....	.....	.....	.....	.....
VitDR	155	PPVRV....	NDGGGSVTL	ELS..	.....	.....	.....
PPARgamma	228	.....	.....	.....LTKAKAR	AILTGKTTDK	SPFVIYDMNS	LMMGEDKIKF
MR	.....	.....	.....	.....	.....	.....	.....
TRbeta	248	..EDIGQAPK	V.....	.....	.....	.....	.....
GR	.....	.....	.....	.....	.....	.....	.....
RXRalpha	271	.....	.....Q...AADK	QLFTLVEWAK	RIPHSELPL	DDQVILLRAG	
RARgamma	223	.....	.....DLGLWDK	FSE...LATK	CIIKIVEFAK	RLPGFTGLSI	ADQITLLKAA
PR	718	.....	.....	.....LNQLGER	QLLSVVKWSK	SLPGFRNLHI	DDQITLIQYS
AR	705	.....	.....	.....LNELGER	OLVHVVKWAK	ALPGFRNLHV	DDQMAVIQYS
ERalpha	345	.....	.....	.....LTNLADR	ELVHMINWAK	RVPGFVDLTL	HDQVHLLECA
ERbeta	294	.....	.....	.....LTKLADK	ELVHMISWAK	KIPGFVELSL	FDQVRLLESC
VitDR	172	.....	.....QLSMLPH	LAD...LVSY	SIQKVIGFAK	MIPGFRDLTS	EDQIVLLKSS
PPARgamma	265	KHITPLQEQS	KEVAIRIFQG	CQF...RSVE	AVQEITEYAK	SIPGFVNLDL	NDQVTLLKYG
MR	769	.....	.....	.....LNRLAGK	QMIQVVKWAK	VLPGFKNLPL	EDQITLIQYS
TRbeta	257	.....	.....DLEAFSH	FTK...IITP	AITRVVDFAK	KLPMFCELPC	EDQIILLKG
GR	563	.....	.....	.....LNMLGGR	QVIAAVKWAK	AIPGFRNLHL	DDQMTLLQYS

## ANNOTATED SHEET

**FIGURE 2 (continued)**

## ANNOTATED SHEET

### FIGURE 6 (Continued)

u87951 Squirrel  
 AF141371 Pig  
 113196 Guinea Pig  
 u87953 Marmoset  
 u87952 Ma'z Monkey  
 Human  
 m14053 rat  
 x04435 mouse

SPLAGEEDSF LLEGNSNEDC KPLILPDTKP KIKDNGDLVL SSSSNVTLPQ  
 SPLAGEEDPF LLEGSSTEDC KPLVLPDTKP KVKDNGELIL PSPNSVPLPQ  
 SPLAGEDDPF LLEGNSNEDC KPLILPDTKP KIKDNGDGIL SSSNSVPQPQ  
 SPLAGEEDSF LLEGNSNEDC KPLILPDTKP KIKDNGDLVL SSSSNVTLPQ  
 SPLAGEEDSF LLEGNSNEDC KPLILPDTKP KIKDNGDLVL SSSSNVTLPQ  
 SPLAGEDDSF LLEGNSNEDC KPLILPDTKP KIKDNGDLVL SSPSNVTLPQ  
 SPLAGEDDPF LLEGNTNEDC KPLILPDTKP KIKDTGDTIL SSPSSVALPQ  
 SPLAGEDDPF LLEGDVNEDC KPLILPDTKP KIQDTGDTIL SSPSSVALPQ

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 u87952 Ma'z Monkey  
 Human  
 m14053 rat  
 x04435 mouse

VKTEKEDFIE LCTPGVIKQE KLSTVYCQAS FPGANIIGNK MSAISIHGV  
 VKTEKEDFIE LCTPGVIKQE KLGPAYCQAS FSGANIIGGK MSAISVHGVS  
 VKIGKEDFIE LCTPGVIKQE KLGPVYCQAS FSGANIIGNK MSAISVHGVS  
 VKTEKEDFIE LCTPGVIKQE KLSTVYCQAS FPGANIIGNK MSAISIHGV  
 VKTEKEDFIE LCTPGVIKQE KLSTVYCQAS FPGANVIGNK MSAISIHGV  
 VKTEKEDFIE LCTPGVIKQE KLGTVYCQAS FPGANIIGNK MSAISVHGVS  
 VKTEKDDFIE LCTPGVIKQE KLGPVYCQAS FSGTNIIGNK MSAISVHGVS  
 VKTEKDDFIE LCTPGVIKQE KLGPVYCQAS FSGTNIIGNK MSAISVHGVS

u87951 Squirrel  
 AF141371 Pig  
 113196 Guinea Pig  
 u87953 Marmoset  
 u87952 Ma'z Monkey  
 Human  
 m14053 rat  
 x04435 mouse

TSGGQMYHYD MNTA.SLSQQ QDQKPIFNVI PPIPVGSENW NRCQGSGDDN  
 TSGGQLYHYD MNTAASLSKQ QEQQPLFNVI PPIPVGSENW NRCQGSGDDN  
 TSGGQMYHYD MNTA.SLSQQ QDQKPIFNVI PPIPVGSENW NRCQGSGEDN  
 TSGGQMYHYD MNTA.SLSQQ QDQKPIFNVI PPIPVGSENW NRCQGSGDDN  
 TSGGQMYHYD MNTA.SLSQQ QDQKPIFNVI PPIPVGSENW NRCQGSGDDN  
 TSGGQMYHYD MNTA.SLSQQ QDQKPIFNVI PPIPVGSENW NRCQGSGDDN  
 TSGGQMYHYD MNTA.SLSQQ QDQKPVFNVI PPIPVGSENW NRCQGSGEDS  
 TSGGQMYHYD MNTA.SLSQQ QDQKPVFNVI PPIPVGSENW NRCQGSGEDN

u87951 Squirrel  
 AF141371 Pig  
 113196 Guinea Pig  
 u87953 Marmoset  
 u87952 Ma'z Monkey  
 Human  
 m14053 rat  
 x04435 mouse

LTSLGTLNFP GRTVFSNGYS SPSMRPDVSS PPSSSSTAT GPPPKLCLVC  
 LTSLGTLNFS GRSVFSNGYS SPGMRPDVSS PPSSSSAAT. GPPPKLCLVC  
 LTSLGTVNFP GRSVFSNGYS SPGLRPDVSS PPSSSST.TT GPPPKLCLVC  
 LTSLGTLNFP GRTVFSNGYS SPSMRPDVSS PPSSSSTAT GPPPKLCLVC  
 LTSLGTLNFP GRTVFSNGYS SPSMRPDVSS PPSSSSTAT GPPPKLCLVC  
 LTSLGTLNFP GRTVFSNGYS SPSMRPDVSS PPSSSSTAT GPPPKLCLVC  
 LTSLGALNFP GRSVFSNGYS SPGMRPDVSS PPSSSSAAT. GPPPKLCLVC  
 LTSLGAMNFA GRSVFSNGYS SPGMRPDVSS PPSSSSTAT GPPPKLCLVC

u87951 Squirrel  
 AF141371 Pig  
 113196 Guinea Pig  
 u87953 Marmoset  
 u87952 Ma'z Monkey  
 Human  
 m14053 rat  
 x04435 mouse

SDEASGCHYG VLTCGSCKVF FKRAVEGQHN YLCAGRNDI IDKIRRNCP  
 SDEASGCHYG VLTCGSCKVF FKRAVEGQHN YLCAGRNDI IDKIRRNCP  
 SDELSGCHYG VLTCGSCKVF FKRAVEGQHN YLCAGRNDI IDKIRRENCP  
 SDEASGCHYG VLTCGSCKVF FKRAVEGQHN YLCAGRNDI IDKIRRNCP  
 SDEASVCHYG VLTCGSCKVF FKRAVEGQHN YLCAGRNDI IDKIRRNCP

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**FIGURE 6 (Continued)**

u87951 Squirrel	ACRYRKCLQA GMNLEARKTK KKIKGIIQQAT TGVSQETSEN PANKTIVPAT
AF141371 Pig	ACRYRKCLQA GMNLEARKTK KKIKGIIQQAT TGVSQETSEN SANKTIVPAT
113196 Guinea Pig	ACRYRKCLQA GMNLQARKTK KKIKGIIQQAT TGVSQNTSEN P.NKTIVPAT
u87953 Marmoset	ACRYRKCLQA GMNLEARKTK KKIKGIIQQAT TGVSQETSEN PANKTIVPAT
u87952 Ma'z Monkey	ACRYRKCLQA GMNLEARKTK KKIKGIIQQAT TGVSQETSEN PANKTIVPAT
Human	ACRYRKCLQA GMNLEARKTK KKIKGIIQQAT TGVSQETSEN PGNKTIVPAT
m14053 rat	ACRYRKCLQA GMNLEARKTK KKIKGIIQQAT AGVSQDTSEN P.NKTIVPAA
x04435 mouse	ACRYRKCLQA GMNLEARKTK KKIKGIIQQAT AGVSQDTSEN .ANKTIVPAA
u87951 Squirrel	525 LPQLTPLVLS LLE <del>VIEPEVL</del> YAGYDSTVPD STWRIMTTLN ML <del>GGRQVIAA</del>
AF141371 Pig	489 LPQLTPLVLS LLE <del>VIEPEVL</del> YAGYDSSIPD STWRIMTALN ML <del>GGRQVIAA</del>
113196 Guinea Pig	519 LPQLTPLVLS LLE <del>VIEPEVI</del> HSGYDSTSPD STWRIMTTLN ML <del>GGRQVIAA</del>
u87953 Marmoset	525 LPQLTPLVLS LLE <del>VIEPEVL</del> YAGYDSTVPD STWRIMTTLN ML <del>GGRQVIAA</del>
u87952 Ma'z Monkey	525 LPQLTPLVLS LLE <del>VIEPEVL</del> YAGYDSTVPD STWRIMTTLN ML <del>GGRQVIAA</del>
Human	525 LPQLTPLVLS LLE <del>VIEPEVL</del> YAGYDSSVPD STWRIMTTLN ML <del>GGRQVIAA</del>
m14053 rat	543 LPQLTPLVLS LLE <del>VIEPEVL</del> YAGYDSSVPD SAWRIMTTLN ML <del>GGRQVIAA</del>
x04435 mouse	531 LPQLTPLVLS LLE <del>VIEPEVL</del> YAGYDSSVPD SAWRIMTTLN ML <del>GGRQVIAA</del>
u87951 Squirrel	575 VKWAKAIPGF RNLHLDDQMT LLQYSWMFLM AFALGWR <del>SYR</del> QASSNLLCFA
AF141371 Pig	539 VKWAKAIPGF RNLHLDDQMT LLQYSWMFLM VFALGWR <del>SYR</del> QSSASLLCFA
113196 Guinea Pig	569 VKWAKAIPGF KNLHLDDQMT LLQYSWMFLM AFALGWR <del>SYK</del> QSNGSLLCFA
u87953 Marmoset	575 VKWAKAIPGF RNLHLDDQMT LLQYSWMFLM AFALGWR <del>SYR</del> QASSNLLCFA
u87952 Ma'z Monkey	575 VKWAKAIPGF RNLHLDDQMT LLQYSWMFLM AFALGWR <del>SYR</del> QASSNLLCFA
Human	575 VKWAKAIPGF RNLHLDDQMT LLQYSWMFLM AFALGWR <del>SYR</del> QSSANLLCFA
m14053 rat	593 VKWAKAILGL RNLHLDDQMT LLQYSWMFLM AFALGWR <del>SYR</del> QSSGNLLCFA
x04435 mouse	581 VKWAKAIPGF RNLHLDDQMT LLQYSWMFLM AFALGWR <del>SYR</del> QASGNLLCFA
u87951 Squirrel	625 PDLIINEQRM TLPCMYDQCK HMLYVSSELH RLQVSYEEYL CMKTL <del>LLLSS</del>
AF141371 Pig	589 PDLVINEQRM ALPCMYDQCR HMLYVSSELQ RLQVSYEEYL CMKTL <del>LLLSS</del>
113196 Guinea Pig	619 PDLIINEQRM SLPWMYDQCR YMLYVSSELK RLQVSYEEYL CMKTL <del>LLLSS</del>
u87953 Marmoset	625 PDLIINEQRM TLPCMYDQCK HMLYVSSELH RLQVSYEEYL CMKTL <del>LLLSS</del>
u87952 Ma'z Monkey	625 PDLIINEQRM TLPCMYDQCK HMLYVSSELH RLQVSYEEYL CMKTL <del>LLLSS</del>
Human	625 PDLIINEQRM TLPCMYDQCK HMLYVSSELH RLQVSYEEYL CMKTL <del>LLLSS</del>
m14053 rat	643 PDLIINEQRM SLPCMYDQCK HMLFVSSELQ RLQVSYEEYL CMKTL <del>LLLSS</del>
x04435 mouse	631 PDLIINEQRM TLPCMYDQCK HMLFISTELQ RLQVSYEEYL CMKTL <del>LLLSS</del>
u87951 Squirrel	VPKDGLKSQE LFDEIRMTYI KELGKAIVKR EGNSSQNWQR FYQLTKLLDS
AF141371 Pig	VPKDGLKSQE LFDEIRMTYI KELGKAIVKR EGNSSQNWQR FYQLTKLLDS
113196 Guinea Pig	VPKEGLKSQE LFDEIRMTYI KELGKAIVKR EGNSSQNWQR FYQLTKLLDS
u87953 Marmoset	VPKDGLKSQE LFDEIRMTYI KELGKAIVKR EGNSSQNWQR FYQLTKLLDS
u87952 Ma'z Monkey	VPKDGLKSQE LFDEIRMTYI KELGKAIVKR EGNSSQNWQR FYQLTKLLDS
Human	VPKDGLKSQE LFDEIRMTYI KELGKAIVKR EGNSSQNWQR FYQLTKLLDS
m14053 rat	VPKEGLKSQE LFDEIRMTYI KELGKAIVKR EGNSSQNWQR FYQLTKLLDS
x04435 mouse	VPKEGLKSQE LFDEIRMTYI KELGKAIVKR EGNSSQNWQR FYQLTKLLDS

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### FIGURE 6 (Continued)

u87951 Squirrel  
AF141371 Pig  
113196 Guinea Pig  
u87953 Marmoset  
u87952 Ma'z Monkey  
Human  
m14053 rat.  
x04435 mouse

MHEVVENLLN YCFQTFLDKT MSIEFPEMLA EIITNQLPKY SNGNIKKLLF  
MHDVVENLLN YCFQT..... . . . . .  
LHEIVGNLLN ICFKTFLDKT MNIEFPEMLA EIITNQLPKY SNGDIKKLLF  
MHEVVENLLN YCFQTFLDKT MSIEFPEMLA EIITNQLPKY SNGNIRKLLF  
MHEVVENLLN YCFQTFLDKT MSIEFPEMLA EIITNQLPKY SNGNIKKLLF  
MHEVVENLLN YCFQTFLDKT MSIEFPEMLA EIITNQIPKY SNGNIKKLLF  
MHEVVENLLT YCFQTFLDKT MSIEFPEMLA EIITNQIPKY SNGNIKKLLF  
MHDVVENLLS YCFQTFLDKS MSIEFPEMLA EIITNQIPKY SNGNIKKLLF

u87951 Squirrel  
AF141371 Pig  
113196 Guinea Pig  
u87953 Marmoset  
u87952 Ma'z Monkey  
Human  
m14053 rat  
x04435 mouse

HQK (SEQ ID NO:14)  
... (SEQ ID NO:15)  
HQK (SEQ ID NO:16)  
HQK (SEQ ID NO:17)  
HQK (SEQ ID NO:18)  
HQK (SEQ ID NO:19)  
HQK (SEQ ID NO:20)  
HQK (SEQ ID NO:21)